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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/690,558

10/23/2003

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6425

7590 03/25/2008  
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CANADA

EXAMINER

KELLEHER, WILLIAM J

ART UNIT

PAPER NUMBER

3673

MAIL DATE

DELIVERY MODE

03/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/690,558	<b>Applicant(s)</b> LI, CONGHUA	
	<b>Examiner</b> WILLIAM KELLEHER	<b>Art Unit</b> 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Claims 17-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/31/2008.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation in Claims 2 and 10 "...which can result from material compounding, structural design selected from the group consisting of 'sea shell with ribs' structure or foraminous structure, or the like" is unclear to the Examiner. Furthermore, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).
3. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 is written to depend from Claim 1, but recites

some limitations already present in Claim 1. It appears to the Examiner that Claim 9 is meant to be an independent claim and for the purposes of compact prosecution will be treated as such.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Valene (U.S. Patent 6,044,506).

Regarding Claim 1, Valene discloses a cushion device comprising: a substantially flexible hollow, enclosed shell (12) having a predetermined volume, a predetermined expanded shape or a substantial uprightness, and being capable of containing gas and/or liquid without substantial leakage, and at least one port (20) in said shell for ingress and egress of liquid or gas into or from said shell, said port or ports each provided with closure means which can substantially prevent entry and escape of gas or liquid from said shell, wherein said shell is capable of maintaining the predetermined volume, the predetermined expanded shape or the substantial uprightness when the shell is open to ambient liquid or gas pressure. Due to the foam of

Valene, when the liquid is not present in shell 12, the foam will maintain the uprightness of the cushion.

Regarding Claim 2 as best understood, Valene discloses the cushion device of claim 1 wherein said shell is adapted to maintain the predetermined volume, the predetermined expanded shape or the substantial uprightness due to its inherent property or properties selected from the group consisting of firmness, rigidity or stiffness which can result from material compounding, structural design selected from the group consisting of 'sea shell with ribs' structure or foraminous structure. Valene discloses an inner foam core that through its firmness and rigidity will help the cushion maintain its substantial uprightness.

Regarding Claim 3, Valene discloses the cushion device according to claim 1, comprising spacing means (24 and 25) within said shell for maintaining said predetermined volume, predetermined expanded shape or substantial uprightness.

Regarding Claim 4, Valene discloses the cushion device according to claim 3, wherein said spacing means comprises one or a plurality of substantially hollow or foraminous structures selected from the group consisting of cylinders, cages, tubes, foam shapes, voluminous fiber masses made of substantially flexible material such as a polymer material, the structures allowing sufficiently free flow of gas or liquid between the outside and the inside of said hollow structures. Valene discloses foam shapes.

Regarding Claim 5, the foam of Valene is considered partly detached from the shell at the "valleys" of the convoluted foam shape.

Regarding Claim 8, Valene discloses the cushion device according to claim 1, wherein said shell defines two opposed large surfaces and said port or ports are located on the large surface or surfaces of said shell to facilitate filling the shell with liquid when the shell is placed flat on one of its large surfaces. This is shown in Figure 2. The surface with port 20 is considered a large surface.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6, 7, 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valene.

Regarding Claim 6, Valene discloses using vinyl. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use any waterproof materials, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. See also Ballas Liquidating Co. v. Allied industries of Kansas, Inc. (DC Kans) 205 USPQ 331. Valene discloses the desire to keep the bladder waterproof. Regarding the claimed methods of material manufacture, MPEP 2113 Product-by-Process Claims states that "If the product in the product-by-process claim is that same as or obvious from a product of the

prior art, the claim is unpatentable even though the prior art product was made by a different process." A shell is anticipated by Valene. The process by which the material for the shell is made is not a patentable distinction.

Regarding Claim 7, Valene discloses a port and a shell, the process by which the joined to the shell is not a patentable distinction. See rejection of Claim 6.

Regarding Claim 9, Valene discloses the cushion device according to claim 1, capable of use in a gas or liquid or a mixed gas-liquid ambiance or the like, comprising: a substantially flexible hollow, enclosed shell having a predetermined volume, a predetermined expanded shape or a substantial uprightness, and being capable of containing gas and/or liquid without substantial leakage, and a port substantially near one edge and at least one substantially near the opposite edge of said shell that can allow gas or liquid fluid to enter into or to escape from said shell, said ports each being provided with closure means which can substantially prevent entry and escape of gas or liquid from the shell, and wherein said shell is capable of maintaining the predetermined volume, the predetermined expanded shape or the substantial uprightness when the shell is open to ambient gas or liquid pressure. Valene does not disclose multiple ports. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a second port, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. A second port would operate according to the predictable established function of the first port, which is to allow a transfer of material between the inside and outside of the cushion.

Regarding Claim 10 as best understood, Valene discloses the cushion device of claim 9 wherein said shell is adapted to maintain the predetermined volume, the predetermined expanded shape or the substantial uprightness due to its inherent property or properties selected from the group consisting of firmness, rigidity or stiffness which can result from material compounding, structural design selected from the group consisting of 'sea shell with ribs' structure or foraminous structure. Valene discloses an inner foam core that through its firmness and rigidity will help the cushion maintain its substantial uprightness.

Regarding Claim 11, Valene discloses the cushion device according to claim 9, comprising spacing means (24 and 25) within said shell for maintaining said predetermined volume, predetermined expanded shape or substantial uprightness.

Regarding Claim 12, Valene discloses the cushion device according to claim 9, wherein said spacing means comprises one or a plurality of substantially hollow or foraminous structures selected from the group consisting of cylinders, cages, tubes, foam shapes, voluminous fiber masses made of substantially flexible material such as a polymer material, the structures allowing sufficiently free flow of gas or liquid between the outside and the inside of said hollow structures. Valene discloses foam shapes.

Regarding Claim 13, the foam of Valene is considered partly detached from the shell at the "valleys" of the convoluted foam shape.

Regarding Claim 14, Valene discloses using vinyl. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use any waterproof materials, since it has been held to be within the general skill of a worker in



the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. See also Ballas Liquidating Co. v. Allied industries of Kansas, Inc. (DC Kans) 205 USPQ 331. Valene discloses the desire to keep the bladder waterproof. Regarding the claimed methods of material manufacture, MPEP 2113 Product-by-Process Claims states that "If the product in the product-by-process claim is that same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process." A shell is anticipated by Valene. The process by which the material for the shell is made is not a patentable distinction.

Regarding Claim 15, Valene discloses a port and a shell, the process by which the joined to the shell is not a patentable distinction. See rejection of Claim 6.

Regarding Claim 16, Valene discloses the cushion device according to claim 9, wherein said shell defines two opposed large surfaces and said port or ports are located on the large surface or surfaces of said shell to facilitate filling the shell with liquid when the shell is placed flat on one of its large surfaces. This is shown in Figure 2. The surface with port 20 is considered a large surface.

### ***Double Patenting***

5. Claim 9 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,760,933. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claim 1 of U.S. Patent No. 6,760,933 requires a plurality of ports near the

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upper and lower ends. The limitations "near" is a broad term and the plurality of ports claimed in claim 9 of the instant application would both be near the upper and lower ends of the cushion.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM KELLEHER whose telephone number is (571)272-7753. The examiner can normally be reached on Monday - Friday 9:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571)-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. K./  
Examiner, Art Unit 3673

/Patricia L Engle/  
Supervisory Patent Examiner, Art  
Unit 3673

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